UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 0 4 2010

REPLY TO THE ATTENTION OF:

Colonel Michael P. Crall
District Engineer
U.S. Army Corps of Engineers
Pittsburgh District
2200 William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222-4186

Dear Colonel Crall:

The U.S. Environmental Protection Agency has reviewed public notice (PN) 2003-1526 issued on December 5, 2009, which states that the Ohio Valley Coal Company (OVCC) is proposing to construct a slurry impoundment in Sections 35 and 36 of Washington Township, Belmont County, Ohio. The purpose of the project is to provide 16 years of fine and coarse refuse disposal for OVCC's Powhatan No. 6 Mine and American Energy Corporation's Century Mine by constructing the proposed No. 3 impoundment. OVCC currently operates the Powhatan No. 6 underground mine, which is a longwall mine producing up to 8,000,000 tons per year of clean coal from the Pittsburgh (No. 8) coal seam. The mine currently uses the No. 2 impoundment on Perkins Run, built in 1977, for the decanting of process water and the storage of fine coal refuse. The impoundment is also used by the American Energy Corporation's Century underground mine for slurry disposal. At the current rate of coal production, the No. 2 Slurry impoundment will reach its capacity by 2011. However, OVCC recently received a permit to expand the capacity of the No. 2 impoundment by raising the elevation to 1200 feet. This is expected to provide 7-8 years of additional refuse disposal capacity.

The project, as proposed, will impact 29,928 linear feet (lft) of 72 headwater streams: 6,426 lft of ephemeral, 13,928 of intermittent and 9,574 lft of perennial. According to the Ohio Environmental Protection Agency (OEPA), the *existing* aquatic life use of Casey Run is coldwater habitat (CWH). Casey Run discharges into Captina Creek, an Outstanding State Resource Water. It is our understanding that on April 24, 2008, OEPA issued a proposed denial of State 401 Water Quality Certification for this project. The applicant has subsequently revised and resubmitted an application for the proposed impoundment.

Based on the information contained in the PN and associated Section 404 permit application materials, EPA finds this project will have substantial and unacceptable adverse

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impacts on Captina Creek, an Aquatic Resource of National Importance (ARNI). Therefore, we object to the project, as currently proposed. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(b) regarding Section 404(q) of the Clean Water Act.

EPA believes that impacting 29,928 lft of Casey Run, its headwaters, and wetlands will have substantial and unacceptable adverse effects on Captina Creek through the elimination of headwater stream functions, loss of diluting headwaters, and loss of nutrients and habitat. Seventy-two headwater streams will be impacted by this proposed impoundment. Headwater streams, and their associated wetland and riparian systems, improve water quality by diluting and filtering pollutants from surface water runoff and provide processed leaf litter and organic matter, which are important to sustaining biological communities in downstream waters. Combined, organic interactions and improvements in water quality and stream channel conditions provide habitat for aquatic fauna that depend upon seasonally flooded habitat for advancement in their life cycle. In turn, aquatic fauna contribute to the overall biodiversity of the watershed by fitting into the complex food webs of Casey Run and Captina Creek. Additionally, terrestrial fauna including mammals and passerines benefit from the interconnected stream corridors that create edge habitat, travel corridors and supply cover and food sources.

EPA considers Captina Creek an ARNI due to the value it provides in terms of water quality, unique habitat, and biodiversity. Per Ohio's antidegradation rules (Chapter 3745-1-05), Captina Creek is an Outstanding State Resource Water based on exceptional ecological values from RM 25.42, which is upstream from Casey Run, down to RM 0.7, just before it enters the Ohio River, a total of approximately 25 miles (almost its entire length). It is designated by the State of Ohio as exceptional warmwater habitat (EWH), which means it is capable of supporting and maintaining an exceptional or unusual community of warmwater aquatic organisms having a species composition, diversity, and functional organization comparable to the seventy-fifth percentile of the identified reference sites on a statewide basis.

Based on data collected by OEPA, Captina Creek has excellent species diversity, a high number of sensitive fish species, the highest average IBI (fish) score in Ohio, excellent habitat, very few ammonia detects and is in the top 10 average ICI (macroinvertebrate) scores in Ohio. Captina Creek also has the last breeding population of the Eastern Hellbender Salamander (*Cryptobranchus alleganiensis*). According to the U.S. Fish and Wildlife Service (USFWS), the hellbender salamander is a large, entirely aquatic salamander currently listed as endangered by Ohio and under evaluation for Federal Candidate Status, which may lead to a proposal for listing as federally threatened or endangered in the near future. These salamanders live 25 to 30 years, do not start breeding until they are 10 years old and require clean substrate to thrive. Captina Creek has a greater number and wider size (age) range of Eastern Hellbenders than any other stream in Ohio. It's the only stream in Ohio in which young hellbenders (~ 5-7 years old) have been identified since the 1980's. There has been an approximately 80% decline in the Eastern Hellbender population in Ohio since the late 1980's.

In an August 11, 2004 letter to Colonel Raymond K. Scrocco of the Pittsburgh District, the USFWS concluded that the proposed impoundment will have significant and permanent effects on fish and wildlife resources in Casey Run and Captina Creek. They stated that

sediment loading into Captina Creek from construction of the proposed impoundment, and the potential for slurry spills, such as the one that occurred on February 2008, would adversely affect hellbender respiration, feeding and reproduction. Documented slurry releases have impacted Captina Creek since 1999. The most recent spills have been caused by a broken slurry pipeline from American Energy Corporation mine in 2005, polluting 2,300 feet of Captina Creek and killing thousands of fish, and slurry released by Ohio Valley Coal into Captina Creek on February 28, 2008, when a pump slipped into the impoundment. The USFWS has concluded that since the hellbender exhibits limited mobility and requires clean substrate, a structural failure of the proposed impoundment would possibly result in the species being extirpated from Captina Creek.

Section 230.10(a) of the 404b)(1) Guidelines prohibits a discharge if there is a less environmentally damaging practicable alternative to the proposed project. Section 230.10(d) prohibits discharges unless all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem. EPA believes there are practicable opportunities to both avoid impacts to aquatic resources and minimize unavoidable impacts to Casey Run. EPA has raised some of these alternatives to the Corps and the applicant, most recently in a letter to Pittsburgh District on September 30, 2009. Although the applicant has responded to some of these alternatives, EPA continues to believe more information is needed before removing them from consideration.

In particular, the applicant continues to evaluate the project as a combination of a coarse refuse structure, which is used to retain the fine coal refuse, and a fine refuse impoundment. As the constraints are different for fine coal refuse and coarse refuse, the applicant should evaluate the disposal of each separately. It is understood that excavating a fine coal refuse disposal area has a higher cost but the applicant should provide detailed cost estimates of each option including mitigation costs before they can make the statement that it is "too expensive."

The quantities of coal to be mined and the capacity for both the fine coal and coarse coal refuse in the existing No. 2 dam plus the proposed dam needs to be further clarified, in order to verify the claim that the proposed action is a "life of mine" solution. The proposal that the deck of the completed No. 2 impoundment or the Casey Run impoundment can be used for coarse refuse is not logical, as the preparation plant produces both coarse and fine refuse at the same time and there will never be a situation, under the current operating practices, where only coarse refuse is produced.

The applicant uses the uncertainty of the mine plan to eliminate the consideration of some disposal options, such as access to the Lamira site or the use of underground disposal. Changes to the mine plan could allow for alternative underground disposal, including the use of paste technology. These should be further evaluated. Before being eliminated from the analysis, the applicant must first be able to demonstrate that the alternative is actually impracticable. Furthermore, the statement that the Century Mine has adequate coarse refuse disposal capacity needs review, especially as the stated 131 million ton capacity contains the caveat "with the acquisition of additional neighboring property." Clarification is required to define current capacity and if these additional properties will require Section 404 permits.

The economics of enhanced plant recovery should be considered especially as the financial returns from plant upgrades, such as the recent froth flotation upgrade, could justify the project and reduce the waste production. All of the avoidance and minimization points discussed above require additional discussion and documentation from the applicant before they can be deemed impracticable under the Guidelines.

EPA considers total loss of nearly 30,000 lft of headwater stream, currently supporting coldwater habitat, to be significant degradation under the 404(b)(1) Guidelines, and that loss will in turn contribute to significant degradation of Captina Creek, an Outstanding State Resource Water. These losses will significantly impact the associated habitat, water quality, and food web of Captina Creek. The compensatory mitigation proposed in the PN is inadequate to lower the proposed activity's impacts below the level of significance.

In April 2003, EnviroScience, Inc. conducted a Headwater Habitat Evaluation Index (HHEI) of Casey Run and its tributaries and included the information in a delineation report. EnviroScience, Inc. calculated a HHEI score of 70 or more at 6 locations. Typically, scores of 70 or greater indicate that the stream is a Class III-Primary Headwater Habitat (PHWH). Class III-PHWH streams are the highest quality and support a cool/cold water biotic assemblage and commonly contain species that have adapted to the presence of cool/cold water all year, such as certain salamander species and macroinvertebrates like those found in Casey Run. These streams possess unique characteristics and require the highest level of protection because they are home to unique assemblage of aquatic communities, their ability to dissipate energy, process sediment loads and reduce siltation downstream, maintain the hydrological and physical dynamics of receiving waters and maintain and protect beneficial uses (EWH) downstream.

Ohio EPA used the HHEI methodology to evaluate Casey Run at river miles 0.75-0.77, 1.13, and 1.43-1.45 in July 2004. At these three locations, scores were calculated to be 84, 83, and 73, respectively. In June and July 2007, EnviroScience conducted HHEI evaluations on Casey Run, Reeves Hollow, and Berrys Run, which are three headwater tributaries of Captina Creek. HHEI scores for segments of Casey Run were 85, 74, and 72, which places Casey Run in the Class III-PHWH category and is consistent with the Ohio EPA's assessment.

According to the applicant, proposed compensation for the functional loss of 29,928 lft of perennial, intermittent, and ephemeral stream channels and 0.463 acres of wetlands would be achieved through: 1) the creation of 0.69 aces of scrub/shrub and emergent wetlands; 2) creation of 17,875 lft of tributary diversion ditches; 3) enhancement of 6,600 lft of Perkins Run; 4) preservation of 37,000 lft of Millers Run and a minimum 100 foot riparian buffer along that length; 5) streambank stabilization and riparian plantings along 10,000 lft of Captina Creek west of the proposed impoundment; 6) streambank stabilization and fencing on 5,000 lft of Reeves Hollow/Berrys Run at the Perkins Run Farm, 7,934 linear feet of stabilization and fencing on unnamed tributaries to Anderson Run and Millers Run at the Campbell Farm, and 6,314 linear feet of stabilization and fencing on unnamed tributaries to Joy Fork at the Kemp Farm; and 7) passive treatment of acid mine drainage which is expected to improve the water quality of Captina Creek for approximately 2,000 lft adjacent to Linn Tipple. EPA considered the proposed mitigation to be far below the value and level necessary to compensate for the total loss of Casey Run and its headwaters. The tributary diversion ditches are primarily intended to

convey stormwater flow away from the site and are unlikely to provide adequate functional replacement for high-quality headwater tributaries. Similarly, the riparian enhancements on nearby stream reaches may provide some functional lift, but EPA believes it will be well below what would be needed to replace lost stream functions. In order to fully compensate for such a large loss of tributaries, EPA would typically expect a conceptual mitigation plan that would involve large scale restoration, enhancement, and preservation of stream tributaries. EPA would recommend significantly higher mitigation ratios to compensate for these impacts, with a focus on stream restoration and preservation, not creation and enhancement as currently proposed.

In summary, EPA believes the project, as proposed, will have substantial and unacceptable adverse impact on Captina Creek, an Aquatic Resource of National Importance. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(b) regarding Section 404(q) of the Clean Water Act. EPA will submit detailed comments on the December 4, 2009, permit application in subsequent correspondence. Thank you for the opportunity to review this information. If you have questions concerning EPA's comments on the proposed project, please contact me, or Wendy Melgin of my staff, at (312) 886-7745.

Sincerely,

Walter W. Kovalick Jr.

Bharat Mathur for
Acting Regional Administrator

cc: C. Korleski, OEPA
S. Logan, ODNR
M. Knapp, USFWS